

# Notice of Allowability

Application No.

10/790,163

Examiner

Jennifer Doan

Applicant(s)

EDWARDS, PHILLIP J.

Art Unit

2874

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on March 1, 2004.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Jennifer Doan

## **DETAILED ACTION**

### ***Drawings***

1. The drawings, filed on March 1, 2004, are accepted by the Examiner.

### ***Specification***

2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Allowable Subject Matter***

3. Claims 1-15 are allowed.
4. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to disclose or reasonably suggest a method and an apparatus of a mounting structure in optical subassemblies having less sensitivity to temperature variations comprising a mounting comb with a plurality of spaced apart fingers fixedly mounted on the substrate; a receiving comb with a plurality of spaced apart fingers having the optoelectronic device fixedly mounted thereon and the fingers of the receiving comb being fixed in an interdigitated orientation with the fingers of the mounting comb by a layer of adhesive positioned therebetween so that the I/O light port of the optoelectronic device is optically aligned with the I/O light port of the optical system in combination with the other limitations of claims 1, 7 and 13.

Claims 2-6 depend from claim 1.

Claims 8-12 depend from claim 7.

Claims 14 and 15 depend from claim 13.

5. The prior art cited on attached form PTO-892 is the most relevant prior art known. However, the invention of claims 1-15 distinguishes over the prior art of record for the following reasons:

Heanue et al. (U.S. Patent 6,301,403) disclose an optical microswitching device having combs with fingers interdigitated. However, Heanue et al. fail to disclose a mounting structure in optical subassemblies comprising a mounting comb with a plurality of spaced apart fingers fixedly mounted on the substrate; a receiving comb with a plurality of spaced apart fingers having the optoelectronic device fixedly mounted thereon and the fingers of the receiving comb being fixed in an interdigitated orientation with the fingers of the mounting comb by a layer of adhesive positioned therebetween.

Que et al. (U.S. Patent 6,377,718) disclose a micromechanical phase shifting gate optical modulator having combs with fingers interdigitated. However, Que et al. do not particularly disclose a mounting structure in optical subassemblies comprising a mounting comb with a plurality of spaced apart fingers fixedly mounted on the substrate; a receiving comb with a plurality of spaced apart fingers having the optoelectronic device fixedly mounted thereon and the fingers of the receiving comb being fixed in an interdigitated orientation with the fingers of the mounting comb by a layer of adhesive positioned there between.

Little et al. (U.S. Patent 6,529,659) disclose a MEMS system having combs with fingers interdigitated. However, Little et al. do not specifically disclose a mounting structure in optical subassemblies comprising a mounting comb with a plurality of spaced apart fingers fixedly mounted on the substrate; a receiving comb with a plurality of spaced apart fingers having the optoelectronic device fixedly mounted thereon and the fingers of the receiving comb being fixed in an interdigitated orientation with the fingers of the mounting comb by a layer of adhesive positioned there between.

Therefore, there is no reason or motivation for one of ordinary skill in the art to use the prior art of record to make the invention of claims 1-15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Doan

Patent examiner

December 8, 2005